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(71) Applicants (for all designated States except US): BIOT-
ICA TECHNOLOGY LIMITED [GB/GB]; Chesterford
Research Park, Little Chesterford, Nr Saffron Walden Essex
CB10 1XL (GB). PFIZER INC. [US/US]; 235 East
42nd Street, New York, NY10017 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): GAISSER, Sabine
[GB/GB]; Biotica Technology Limited, Chesterford Research Park, Little Chesterford, Nr Saffron Walden Essex CB10 1XL (GB).

(74) Agents: STUART, Ian et al.; Mewburn Ellis LLP, York House, 23 Kingsway, London, Greater London WC2B 6HP (GB).

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(54) Title: POLYKETIDES AND THEIR SYNTHESIS

(57) Abstract: Macrolides particularly erythromycins and azithromycins, having O-mycaminosyl or O-angulosaminyl groups, particularly at the 5-position, are produced using a gene cassette comprising a combination of genes which, in an appropriate strain background, are able to direct the synthesis of mycaminose or angulosamine and to direct its subsequent transfer to an aglycone or pseudoaglycone. Synthetic genes may comprise one or more of angMIII, angMI, angB, angAI, angAII, angorf14, angorf4, tylMIII, tylMI, tylB, tylAI, tylAII, eryCVI, spnO, eryBVI, eryK, tyl Ia and ery G. Glycosyltransfer genes may comprise one or more of eryCIII, tylMII, angMII, desVII, eryBV, spnP and midI